PCT

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : G06F 15/173	A1	(11) International Publication Number: **WO 99/44146** (43) International Publication Date: 2 September 1999 (02.09.99)

(21) International Application Number: PCT/US99/03437

(22) International Filing Date: 18 February 1999 (18.02.99)

(30) Priority Data:
09/030,175   25 February 1998 (25.02.98)   US

(71)(72) Applicant and Inventor: LITTLE, Wayne, A. [US/US];
140 East Loch Lloyd Parkway, Belton, MO 64012 (US).

(74) Agent: LUEBBERING, Thomas, B.; Hovey, Williams, Timmons & Collins, Suite 400, 2405 Grand Boulevard, Kansas City, MO 64108 (US).

(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published
With international search report.

---

(54) Title: METHOD OF LINKING COMMUNICATIONS

(57) Abstract

A linking method that allows companies to more effectively promote their Internet websites and that allows users to more easily contact companies' websites and communicate with the companies via other connection options is disclosed. The linking method includes the steps of: establishing a translating site having a database containing a plurality of unique reference characters each associated with a particular entity and cross-referenced with connection options for connecting to the entity; permitting a user to access the translating site (200); prompting the user to enter a unique reference character associated with an entity that the user wishes to communicate with (204); retrieving from the database the connection options associated with the entered reference character (212); prompting the user to select one of the connection options (214); and connecting the user to the entity associated with the entered reference character via the selected connection option (218).

METHOD OF LINKING COMMUNICATIONS

5 BACKGROUND OF THE INVENTION

    1.   FIELD OF THE INVENTION

        The present invention relates to a method of linking communications over the Internet or other communication network. More particularly, the invention relates to a linking method that allows companies to more effectively promote their Internet

10 websites and that allows users to more easily access companies' websites or send electronic, voice and/or video messages to the companies.

    2.   DESCRIPTION OF THE PRIOR ART

        The increasing popularity of the Internet has prompted many companies

15 to establish e-mail accounts and create websites to allow consumers to more easily contact them and obtain information and order products. Unfortunately, however, Internet users currently find it difficult to determine whether a company has an Internet presence. Internet directories and search engines have been created for this purpose; however, directories and search engines must still be accessed by the users before they

20 can determine if a company has an Internet presence. Moreover, with the rapid increase in the number of companies establishing Internet presences, most Internet directories and search engines cannot keep up with all of the new Internet addresses.

        In an attempt to more adequately promote their websites and e-mail accounts, many companies now include their Internet addresses in print, radio, and TV

25 advertising and on business cards, letterheads, etc. This makes it easier for users doing business with the companies or users that see advertising for the companies to access the companies' websites and e-mail accounts. However, website Internet protocol addresses and e-mail addresses are typically long and difficult to pronounce and remember and therefore take up valuable space and time in advertising and are quickly

30 forgotten even when users see or hear the addresses. Many companies therefore cannot afford to place Internet addresses in all of their advertising, and users who would otherwise like to access a company's website or communicate with the company via e-

mail either cannot or will not because of the difficulties in obtaining and remembering the company's Internet addresses.

OBJECTS AND SUMMARY OF THE INVENTION

5   The present invention solves the above-described problems and provides a distinct advance in the state of the art. More particularly, the present invention provides a linking method that allows companies to more effectively promote their Internet websites and that allows users to more easily access companies' websites and communicate with the companies via other connection options.

10   The present invention achieves the foregoing through the creation of a translating Internet website having an Internet protocol address that is heavily advertised and therefore easy to remember such as "www.ucon.com". The translating website includes a database that contains a plurality of short, unique reference characters each associated with and selected by a particular company that subscribes to the translating

15   website service. Each of the reference characters is also cross-referenced with a list of connection options selected by the company for permitting users to connect to the company. For example, the database may include the unique reference character "XYZ1" selected by and associated with the XYZ Company and cross-referenced with connection options that allow users to: access the company's website, send e-mail

20   messages to the company, send facsimile to the company, and make phone calls to the company over the Internet or a regular voice network.

               The companies with unique reference characters in the database may then include their short reference characters in advertising along with a logo, emblem, or icon related to the Internet protocol address of the translating website or along with the actual

25   Internet protocol address of the translating website. Users seeing the short reference characters in combination with the logo, etc., know that they can access the company's website or communicate with the company by first accessing the translating website.

               Once a user accesses the translating website, he or she is greeted with a screen that prompts the entry of a short reference character associated with a

30   company. The translating website translates the entered reference character, identifies the corresponding company, and then retrieves and lists the connection options available for communicating with the company. The user is th n prompted to sel ct one

of the connection options, and the translating websit   automatically connects the user to the entity via the selected option.

The translating website also records the number of times each unique reference character is entered and may automatically record or prompt the entry of the originating Internet addresses or phone numbers of the users. This information is then gathered in "client reports" and periodically sent or made available to the companies subscribing to the service to be used for marketing purposes.

The method of the present invention provides numerous advantages. For example, by allowing companies to create advertising containing their short reference characters along with the logo or easy-to-remember Internet address of the translating website, the companies can more easily direct consumers to their websites, e-mail accounts, 1-800 numbers, etc., without listing all of these connection options directly in the advertising. This highly increases both the effectiveness and cost and space efficiency of advertising.

Moreover, by recording the number of "hits" for each unique reference character, the method of the present invention allows companies to more accurately track the effectiveness of various forms of advertising. For example, the XYZ Company might place advertising for a new product in fifteen different magazines, and each ad could include a separate unique reference character such as "XYZ1", "XYZ2", "XYZ3" ... "XYZ15" along with the logo identifying the translating website. As users access the translating website and enter one of the reference characters, the translating website records the hits so that the XYZ Company can determine which ad or which type of media (i.e., print, TV, radio, etc.) prompts the greatest response. This information, along with the originating Internet addresses or phone numbers of the users, are then put into a "client report" and sent to the XYZ Company.

The method of the present invention also takes advantage of the emerging standards and technology making voice and video communications possible using Internet or Internet-like services. For example, if a user selects a voice pathway, when offered as a connection option, a routing matrix associated with the linking webserver computer routes the call to a designated server in the local telephone service area. The call will be completed using the public telephone network, dedicated services, or internal facilities where the serv r and the telephone terminating point are in the same location.

This process will allow the op rator of the linking website to offer an integrated service at a competitive cost.

The method may also generate profits for the operator of the translating website through various avenues including the sale of the client reports and advertising displayed on the site, and/or service charges for the users of the site or the companies listed in the database of the site.

BRIEF DESCRIPTION OF THE DRAWING FIGURES

A preferred embodiment of the present invention is described in detail below with reference to the attached drawing figures, wherein:

Fig. 1 is a schematic diagram of computer and communication equipment that may be used to implement the method of the present invention;

Fig. 2 is a flow diagram depicting the primary steps of the method of the present invention;

Fig. 3 is a sample advertisement showing the use of a company's unique reference character along with a logo related to the Internet address of the translating website; and

Fig. 4 is an alternate sample advertisement.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring to Fig. 1, the method of the present invention is preferably implemented with a linking webserver computer 10, a specialized computer program stored on a computer-readable memory device for controlling the operation of the linking computer, a plurality of user computers 12 operated by users of the services offered by the linking computer, and one or more website computers 14 operated by companies or other subscribers to the service.

In more detail, the linking webserver computer 10 may be a conventional microcomputer, minicomputer, or mainframe computer such as those manufactured by IBM, Sun, or Digital Equipment Corporation, a "central office" computer, or any other computing device. The computer includes memory, input and output ports, and a dedicated Internet connection and is programm d with conventional www server

operating software and specialized software configur d for implementing the steps described below.

The user computers 12 are owned and operated by users of the present invention when accessing the linking computer 10 as described below and may be any 5 type of computer such as IBM or compatible microcomputers containing Intel Pentium or equivalent-type processors. Each user computer preferably includes memory, input and output ports, and a network connection and is programmed with conventional operating software such as Microsoft Windows and a web browser program such as Netscape Navigator.

10 The website computers 14 are operated by companies that subscribe to the services provided by the linking computer 10 as described below and therefore may be any type of computers capable of supporting Internet services such as websites.

Users operating the computers 12 may communicate with the linking computer 10 via a conventional telecommunications network 16 having a plurality of 15 switches and local exchange carriers that carry Internet traffic. The network may also be a local area network, wide area network, wireless network, voice network, or any other type of communication network.

The linking computer 10 may route digital communications to the website computers 14 via a similar network 18. The linking computer may also route voice 20 communications to the companies via a conventional voice phone network 20.

The method of the present invention begins with the creation of a translating website that is operated by the linking computer 10. The translating website has an Internet protocol address that is heavily advertised and therefore easy to remember such as "www.universalconnection.com" or "www.ucon.com". The Internet 25 protocol address of the translating website may also be advertised along with a logo, emblem, or icon similar to the one identified by the number 22 in Figs. 2 and 4.

The translating website is programmed to include a database for storing and listing a plurality of short, unique reference characters each associated with and selected by a particular company and each cross-referenced with a list of connection 30 options for connecting to the company. The reference characters may be any numeric or alphanumeric characters chosen by a company. For example, the database may include the unique reference character "XYZ1" selected by and associated with the XYZ

Company. Alte nately, the reference charact r for the XYZ Company may merely be the company's local or toll free phone number.

The connection options cross-referenced with the reference characters may include all conventional digital and voice communications options. For example,

5   the database may include connection options cross-referenced with the unique reference character of a subscribing company that allow users to: access the company's website, send e-mail messages to the company, send facsimiles to the company, and make phone calls to the company over the Internet or a regular voice network.

10   The companies having unique reference characters in the database preferably include their short reference characters in their advertising. The advertising should also include some indication that users can contact the company by accessing the translating website operated by the linking computer and entering the unique reference character. For example, as illustrated in Fig. 3, the XYZ Company may select

15   their 1-800 number to be their unique reference character and then place the number in their advertising next to a logo, emblem, or icon 22 that is associated with the Internet address of the translating website. This will direct users that wish to contact the company to first access the translating website. As discussed above, the Internet address for the translating website as well as the logo 22 are heavily advertised and

20   therefore should be easy to remember. Alternatively, the actual Internet address for the translating website such as "www.universalconnection.com" or "www.ucon.com" may be placed in the advertising instead of the logo 22.

Once the translating website is created and a company advertises its unique reference character along with the logo 22 or corresponding Internet address,

25   users seeing or hearing the advertising will know that they can contact the company by first accessing the translating website via the Internet in a conventional manner as depicted by step 200 in Fig. 2. By allowing companies to create advertising including their short reference characters along with the logo or easy-to-remember Internet address of the translating website, the companies can more easily direct consumers to

30   their websites, e-mail accounts, 1-800 numbers, etc., without listing all of these connection options directly in the advertising.

Onc a user has accessed the site, it may initially display advertising as d picted in step 202. The advertising is preferably sel cted so that it is not objectionable to the companies that have unique reference characters stored in the database. For example, if IBM has a unique reference character in the database,
5   advertising for competing computer companies would not be displayed.

The translating website next prompts the user to enter a particular unique reference character as depicted in step 204 and records or captures the entered reference character as depicted in step 206 for use in "client reports" described below. The website may also capture or prompt the entry of the user's originating Internet
10   address or phone number for use in the same client reports. The website may also prompt the entry of additional information such as the age, sex, buying habits, etc., of the user.

The linking computer 10 then translates the entered unique reference character to identify the corresponding company as depicted in step 208. The translating
15   website may also display additional advertising targeted directly to the identified company as depicted in step 210.

The website next lists the connection options that are cross-referenced with the entered reference character and prompts the user to select a desired connection option as depicted in steps 212 and 214. After the user selects a desired
20   connection option, the website records or captures the selected option as depicted in step 216 and adds the information to the corresponding client report along with the information described above.

The linking computer 10 then connects the user to the selected company via the selected connection option as depicted in step 218. For example, if the user
25   selects to be connected to the company's website, the linking computer 10 connects the user to the appropriate website computer 14 via the Internet 18. Alternately, if the user selects to make a phone call to the company, the user may be connected to the company via the Internet with Internet protocol telephony technology or via a conventional voice network 20.

30   The linking computer 10 may also be programmed to automatically connect users to selected companies via one of the listed connection options in accordance with certain connection criteria such as th time of day, day of week, identity

of the user, language of the user, availability of the connection option, availability of the entity, or any other factor. This would nable the companies subscribing to the translating website service to have their communications routed to various locations based on these connection criteria to accommodate scheduling or other considerations.

5   To allow users to search for a company's website when they only know the company's phone number, subscribing companies to the translating website may list all of their phone numbers in the database and cross-reference the phone numbers to their Internet address and/or other connection options. In this embodiment, the linking computer 10 is programmed to provide instructions to the users when they initially

10   access the site and to then prompt the users to enter any telephone number of the company having the website that they would like to access. The linking computer then translates the entered phone number and displays the connection options. This would enable users who may simply obtain a company's phone number from a telephone directory, sign, truck, etc., to access the company's website by first accessing the

15   translating website of the present invention. To promote this service, the operator of the linking computer may advertise the service to let users know that if they have a company's phone number, they can access the company's website or e-mail accounts by first accessing the translating website.

           Periodically or upon request from one of the subscribing companies, the

20   linking computer 10 generates "client reports" for the companies subscribing to the translating website. The linking computer may also be configured to permit the companies to view the client reports in "real time" by way of a communication link controlled by specialized security software and passwords. Each client report contains the data captured in steps 206 and 216 corresponding to the particluar company. The

25   client reports will enable the companies to more accurately track the effectiveness of various forms of advertising. For example, the XYZ Company might place advertising for a new product in fifteen different magazines, and each ad could include a separate unique reference character such as "XYZ1", "XYZ2", "XYZ3" . . . "XYZ15". The translating website records the number of times users access the site and enter the

30   different reference characters so that the XYZ Company can determine which ad or which type of media prompts the great st response. This information, along with the

originating Internet address s or phone numbers of the users, can be used by the company for reaching desired consumers or for evaluating advertising efforts.

The operator of the translating website may charge for the services of the present invention such as through the sale of the client reports and/or advertising
5   displayed on the site or through service charges collected from the users of the site or the companies listed in the database of the site.

Although the invention has been described with reference to the preferred embodiment illustrated in the attached drawing figures, it is noted that equivalents may be employed and substitutions made herein without departing from the scope of the
10   invention as recited in the claims.

Having thus described the preferred embodiment of the invention, what is claimed as new and desired to be protected by Letters Patent includes the following:

CLAIMS:

1. A method of linking communications comprising th steps of:

establishing a translating site having a database containing a plurality of unique reference characters each selected by and associated with a particular entity and cross-referenced with connection options for connecting to the entity;

permitting a user to access the translating site;

prompting the user to enter a unique reference character associated with an entity that the user wishes to communicate with;

retrieving from the database the connection options associated with the entered reference character;

prompting the user to select one of the connection options; and

connecting the user to the entity associated with the entered reference character via the selected connection option.

2. The method set forth in claim 1, further including the steps of:

recording the number of times users access the translating site and the number of times users enter each unique reference character; and

creating a client report for each entity having a reference character in the database, each client report including the number of times users entered the reference character associated with the entity.

3. The method set forth in claim 1, the unique reference characters being selected from the group consisting of: telephone numbers, alphanumeric characters, and numeric characters.
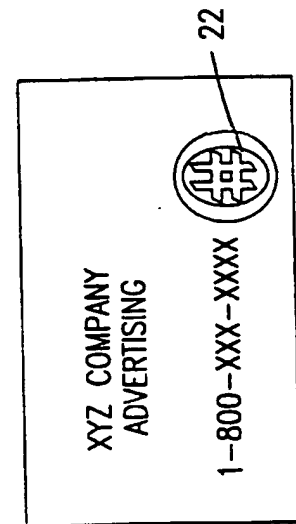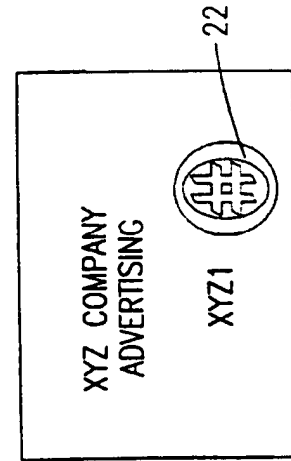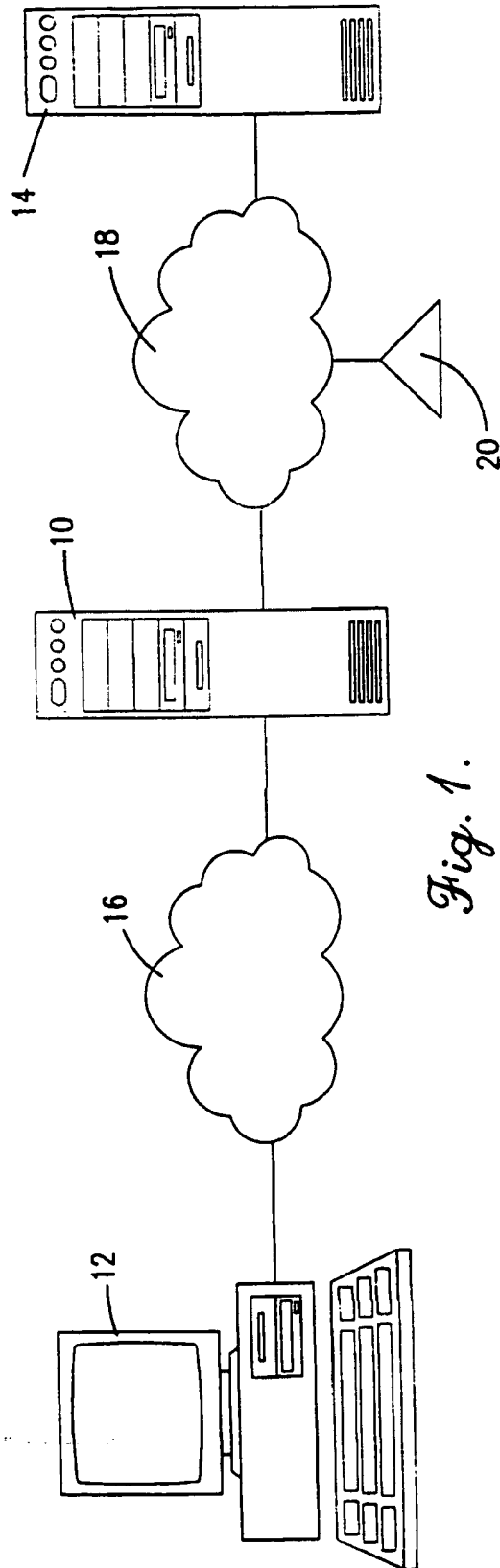
4. The method set forth in claim 1, the connection options being selected from the group consisting of: connecting the user to the entity via the Internet for permitting the user to send an e-mail message to the entity; connecting the user to the entity via the Internet for permitting the user to send a facsimile to the entity; connecting 5 the user to the entity via the Internet for making a phone call to the entity over the Internet; connecting the user to the entity via the Internet for permitting the user to send a video message to the entity; and connecting the user to the entity via a phone network for permitting the user to make a voice phone call to the entity.

10   5. The method set forth in claim 1, the translating site being an Internet website operated by a webserver computer.
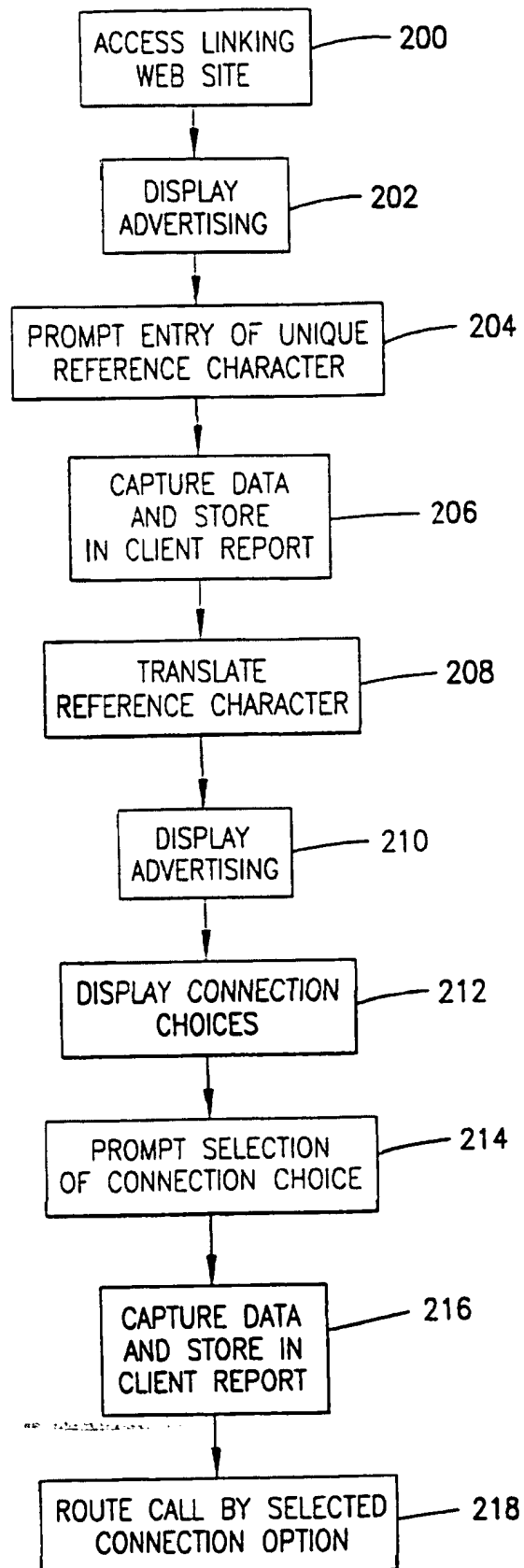
6. The method set forth in claim 1, further including the steps of automatically connecting the user to the entity via one of the connection options in 15 accordance with connection criteria.

7. The method set forth in claim 6, the connection criteria being selected from the group consisting of: time of day; day of week; identity of the user; language of the user; availability of the connection option; and availability of the entity.

20

Fig. 1.

XYZ COMPANY
ADVERTISING

XYZ1

Fig. 4.

XYZ COMPANY
ADVERTISING

1-800-XXX-XXXX

Fig. 3.

Fig. 2.

INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER

IPC(6)   :G06F 15/173
US CL   :709/238, 244, 200
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. :   709/238, 244, 200, 223, 217; 707/3; 345/326

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

IEEE database, APS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A,P	US 5,870,546 A (KIRSCH) 09 February 1999, see entire document.	1-7
A,P	US 5,838,910 A (DOMENIKOS et al) 17 November 1998, see entire document.	1-7

☐ Further documents are listed in the continuation of Box C.   ☐   See patent family annex.

*	Special categories of cited documents:	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A"	document defining the general state of the art which is not considered to be of particular relevance	
"E"	earlier document published on or after the international filing date	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O"	document referring to an oral disclosure, use, exhibition or other means	
"P"	document published prior to the international filing date but later than the priority date claimed	"&"	document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
20 APRIL 1999	19 May 1999

Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231	Authorized officer GLENTON BURGESS *James R Mattews*
Facsimile No. (703) 305-3230	Telephone No. (703) 305-3900

Form PCT/ISA/210 (second sheet)(July 1992)*